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What is claimed is:

- 1. A positive photosensitive resist composition comprising a resin binder and an encapsulated inorganic material.
- 2. The positive photosensitive resist composition of claim 1, wherein the binder is a t-butyl blocked polyvinyl phenol.
- 3. The positive photosensitive resist composition of claim 1, wherein the binder is a polyvinylphenol and t-butyl acrylate copolymer.
- 4. The positive photosensitive resist composition of claim 1, wherein the binder is a polyvinylphenol, t-butyl acrylate and styrene terpolymer.
- 5. The positive photosensitive resist composition of claim 1, wherein the binder is a DNQ novalak binder.
- 6. The positive photosensitive resist composition of claim 1, wherein the encapsulated inorganic material is silicon dioxide. S_1 h C_R
- 7. The positive photosensitive resist composition of claim 1, wherein the encapsulated inorganic material is aluminum oxide.
- 8. The positive photosensitive resist composition of claim 1, wherein the encapsulated inorganic material is titanium dioxide.

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- 10. The positive photosensitive resist composition of claim 1, wherein the content of the encapsulated inorganic material is between about 5% and about 75% by weight of the positive photosensitive resist composition.
- The positive photosensitive resist composition of claim 1, wherein the content of the encapsulated inorganic material is between about 20% and about 50% by weight of the positive photosensitive resist composition.
- 12. The positive photosensitive resist composition of claim 1, wherein the binder and the encapsulated inorganic material form a clear positive photosensitive resist composition.
- 13. The positive photosensitive resist composition of claim 1, further comprising a surfactant.
- 14. The positive photosensitive resist composition of claim 1, further comprising a solvent.
- 15. The positive photosensitive resist composition of claim 1, wherein the encapsulated inorganic material further comprises core particles having an average size ranging from about 1 nm to about 50 nm.
- 16. The positive photosensitive resist composition of claim 15, wherein the average size of the particles ranges from about 1 to about 20 nm.

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17. The positive photosensitive resist composition of claim 1, wherein the encapsulated inorganic material further comprises core particles having an average size less than about 5 nm.

A Charles